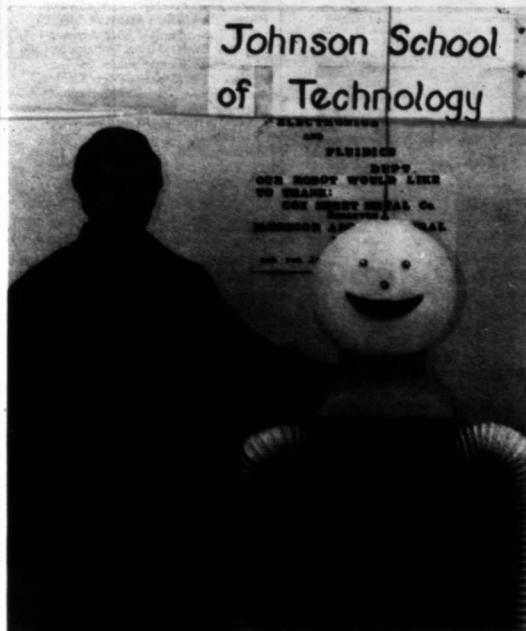


# HAND-BUILT ROBOT GIVES STUDENTS AN INKLING OF WHAT THE FUTURE HOLDS IN ROBOTICS ROBOTICS ROBOTICS



Cappelloni and his robot, Sargand-6 who walks, talks and picks things up.

During a K mart visit, Sargand-6 befriended a small shopper.

**H**e's just like a person. Well, sort of like a person. Except for the fact that his body is made out of aluminum and his head is a big Genesee bee globe, Sargand-6 the robot is humanlike.

Just ask Bob Cappelloni of K mart 7142, Pittston, Pennsylvania who designed and built the robot.

"He walks, talks, can pick things up and move his arms," Cappelloni explains.

Talk? Well, yes and no. The robot has a microphone planted in his body that picks up people's conversations around him. This sound is transmitted up to 40 feet to someone who is out of eye range. They hear the conversation and respond by speaking into another microphone, which is relayed back to the robot, making it appear that the robot is speaking to those around him.

Cappelloni is a recent graduate of Johnson School of Technology in Scranton where he majored in electronics and fluidics.

His inspiration to build a robot came from a Johnson graduating class from about five years ago.

"They built a robot," Cappelloni says. "It was sort of a make shift thing. They threw it together, it ran for a year or so and finally blew up. I thought it would be nice for our class to do it as a project. So during the summer I designed it and rounded up most of the parts and then built it."

He had help from some of the other students, but the majority of work was done by Cappelloni. "It took me a month and a half to design it and two months to build it. It would have taken longer to build, but I was up against a deadline and needed some help. So some other students helped me finish it."

Although the robot was not an actual class assignment, Cappelloni was given an "A" on the project.



Sargand-6 runs on a 12 volt battery as well as a motorcycle battery. "It's been in operation about four months and we have only had to charge the motorcycle battery twice. The 12 volt battery has to be charged every two days."

Sargand-6 has performed at K mart, in a mall show and on a local television marathon. But with Cappelloni busy with graduation, Sargand-6 has just been hanging around the Johnson campus, waiting for an assignment. "I've had so many calls from people that want the robot to be at children's birthday parties, but I've just been too busy with school."

Cappelloni sees a tremendous future in robots at this point. He sees robots doing jobs that humans shouldn't have to do like lifting 150 pound motors for eight hours a day. As far as having a robot in the home Cappelloni says, "With the state of the art as it is progressing you might see the robots in the home by the year 2000. But I really don't see it coming for a while. It's too expensive to be built on a basis like that. The cost to build a robot to run a vacuum would be astronomical, and you would have to buy a mini computer to program it."

"Have a nice day."

